



Infrastructure  
Canada



# Building for Prosperity:

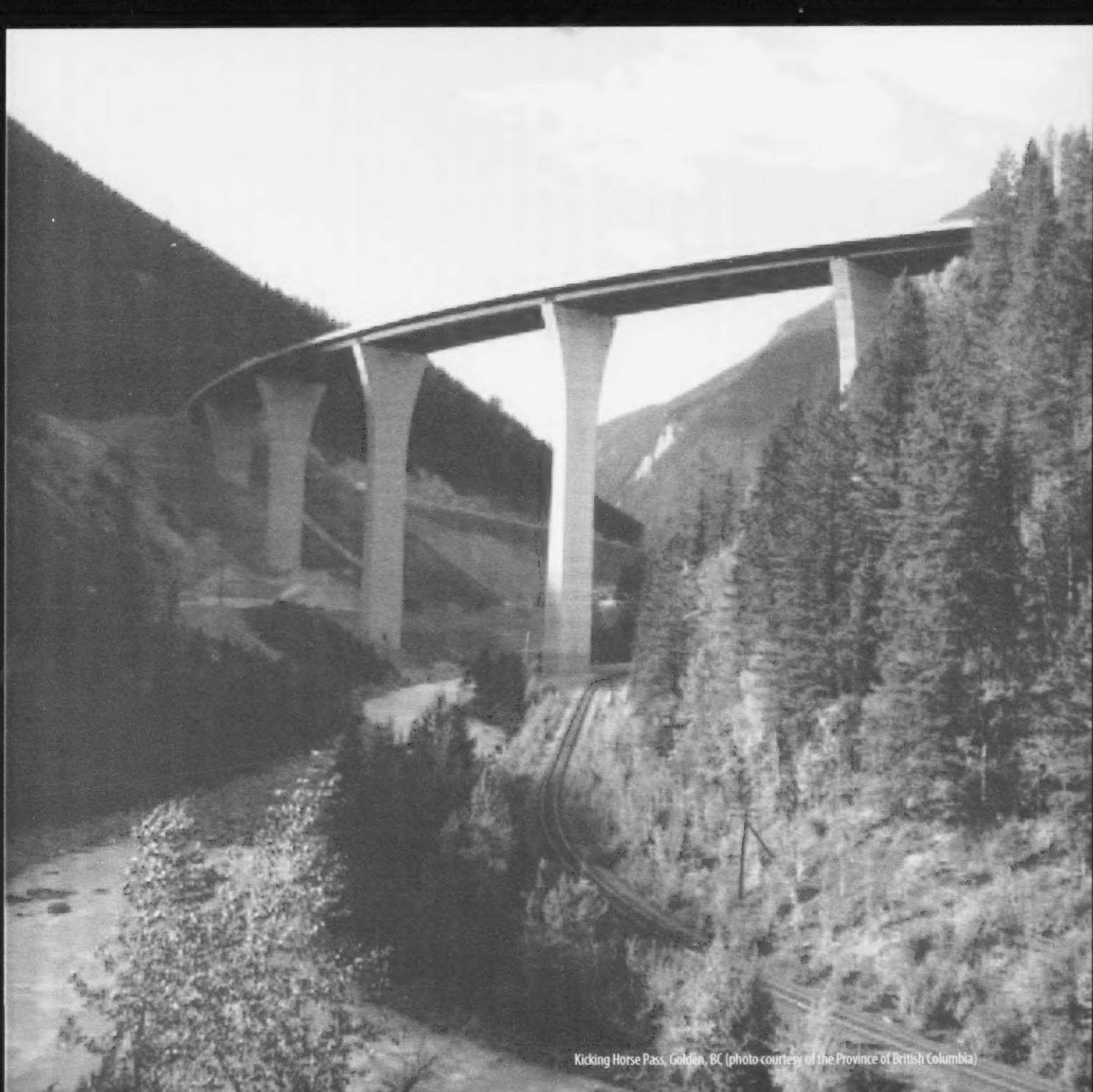
*Public Infrastructure in Canada*



Canada

## *Table of Contents*

<i>Minister's Message</i> . . . . .	1
<i>Building a Nation</i> . . . . .	3
<i>Building Canada through Infrastructure Investments</i> . . . . .	8
<i>Building a Better Canada Together</i> . . . . .	11
<i>The Government of Canada's Investments</i> . . . . .	15
<i>What We Invest In</i> . . . . .	17
<i>Key Areas of Investments</i> . . . . .	21
<i>Looking Ahead</i> . . . . .	29



Kicking Horse Pass, Golden, BC (photo courtesy of the Province of British Columbia)

## Minister's Message



**The Honourable  
Denis Lebel**  
P.C., M.P.

Minister of Transport,  
Infrastructure and Communities  
and Minister of the Economic  
Development Agency of Canada  
for the Regions of Quebec

Public infrastructure has always been, and will continue to be, a key driver of Canada's success as a nation. Whether investing in highways, water treatment, public transit or cultural facilities, these investments help our industries reach global markets, protect our environment and support our cities and communities. Knowing how important infrastructure is to each and every Canadian, I am honoured that the Prime Minister asked me to develop a long-term plan for public infrastructure that extends beyond the expiry of the Building Canada Plan.

Canada's network of public infrastructure is complex and vast, made up of highways and roads, water distribution and treatment facilities, energy generation and distribution, and more — that reach into every community. Sustaining and improving this network requires the involvement of all orders of government. Looking beyond Building Canada, the Government of Canada will engage with our partners and stakeholders in a dialogue on the next public infrastructure plan.

This government has maintained an open discourse with its partners and stakeholders on the best way to support our national objectives through infrastructure investments. Together, we have developed programs that have made Canada a better place in which to work and live. Since 2006, Canada as a whole has invested record amounts in public infrastructure. The success of Canada's Economic Action Plan clearly demonstrates what can be accomplished when all orders of government work together for the benefit of the country.

As the Minister of Transport, Infrastructure and Communities, I am very proud of the achievements that have been made possible through partnerships with our provincial, territorial and municipal counterparts. As we complete our stimulus projects and move to the next phase of Canada's Economic Action Plan, it is time to call upon our partners to join the discussion on the best way forward, with the intent of developing a new long-term infrastructure plan for Canada. A prudent approach to public infrastructure will ensure that Canada retains its competitive advantage and resilient economy.

### **The Honourable Denis Lebel, P.C., M.P.**

Minister of Transport, Infrastructure and Communities  
and Minister of the Economic Development Agency of Canada for the Regions of Quebec



Canadian National Railway Train and Bridge, 1929, Lytton, BC (photo courtesy of Library and Archives Canada, PA-049788)

## Building a Nation

Infrastructure is everywhere and touches everyone. From the water we drink to the roads we drive on, Canada's public infrastructure forms the fabric of our nation. Our quality of life, prospering communities and resilient economy depend on our systems of public infrastructure, and our continued ability to compete successfully on the global stage depends on the quality of these systems.

Since Confederation, the federal government has supported Canada's public infrastructure through investments in railways, the telegraph system, the St. Lawrence Seaway, ports, airports, highways, broadband and other investments, such as those required for national defence or to support national cultural institutions. From isolated colonies in the New World, to a modern vibrant country, our history is etched in public works across a vast landscape.

### 1800s: Building for Confederation

Public infrastructure investments in the 1800s focused on canals and railroads. Massive labour-intensive public works stretched from one frontier to another, uniting a scattered population and giving birth to a nation. The Lachine Canal, completed in 1825, which bypasses treacherous rapids on the St. Lawrence River, created a vital transportation link necessary for the economic success and development of Montréal. The Rideau Canal, originally built for its strategic importance, stretches over 200 km from Ottawa to Kingston. The completion of this inland waterway resulted in the transformation of a small lumber town into Ottawa, the nation's capital. The Rideau Canal, which opened in 1832, is now a recognized world UNESCO heritage site.

Perhaps the most symbolic of Canada's 19<sup>th</sup> century capital works are its railways. A promise of Confederation, railway commitments were written into the *British North America Act* and also secured the union with British Columbia. In a time of rail "mania" throughout the British Empire and America, Canada's sparse 1881 population of 4.3 million built a lasting bond of national unity that weathered natural, political and financial disasters. In the late 1800s, crossing the barren Precambrian Shield and the daunting Rocky Mountains was both dangerous and technically astounding. The first passenger train reached Port Moody, British Columbia, in July 1886, almost eight months after the last spike was hammered in 1885. Over a century and a half later, Canadians still travel on the national rail system.



Construction of Transcontinental Railway, 1909, Northern Ontario,  
(photo courtesy of Stewart M. Ogilvy, Library and Archives Canada, PA-103450)



## Into the Next Century: Industrialization and Urbanization

By the time Saskatchewan and Alberta joined confederation in 1905, more and more Canadians were leaving the family farm and moving into the cities. Although the national urban population would not pass the halfway mark until the 1920s, public works throughout Canada were responding to the new industrial reality and booming cities. Changes, such as electrification, reliable water, waste management and public transit, made cities a viable place for both families and factories. Additionally, manufacturing and industrial growth were well supported by the transportation investments of the 19<sup>th</sup> century.

Montréal published its first telephone directory in the 1880s and by the mid-1890s cities across the country, including Vancouver and Winnipeg, had electric street car systems. Public infrastructure supported the movement of raw materials across the dominion, and significant investments supported the new urban working class. The Union of Canadian Municipalities, a forerunner of the Federation of Canadian Municipalities, was well aware of the new role of cities when it held its first meeting in 1901. Steel building frames and suburbs were the hallmarks of a new economy driven by urban centres connected by water, rail, telegraph and the telephone.



Marine crane loading boilers and engine assemblies at shipyard, 1943, Montréal, QC (photo courtesy of the National Film Board of Canada and Library and Archives Canada)

## Public Infrastructure: The Golden Age

After World War II, countries around the world began to rebuild. The 1950s and 1960s are generally considered to be the Golden Age of modern infrastructure. Building the 306-km section from Montréal to Lake Ontario of the St. Lawrence Seaway, a joint Canada-U.S. undertaking, became one of the great public works projects of this era. Recognized as one of the most challenging engineering feats in history, the Seaway overshadowed even the Suez Canal built in 1869 and the Panama Canal built in 1914. Prime Minister John Diefenbaker, President Dwight D. Eisenhower and Queen Elizabeth II officially opened the St. Lawrence Seaway in 1959.



Construction workers on the St. Lawrence Seaway, 1952 (photo courtesy of the National Film Board of Canada and Library and Archives Canada, PA 206919)

Enthusiasm for public infrastructure as nation building also extended to our cultural heritage. Libraries, arenas and art galleries were built across the country in celebration of Canada's centennial, including Ottawa's National Arts Centre.

In the post-war boom, the automobile became a symbol of prosperity, individuality and modernity. While the railways were still the foundation of the transportation system, work began to unite Canada by highway. In 1949, the federal government passed the *Trans-Canada Highway Act* which set the stage for joint federal-provincial funding of what would become the world's longest national highway. In 1962, with cars lining the road for three kilometres in each direction, the prime minister and representatives from all ten provinces officially opened the Trans-Canada Highway at Rogers Pass near Revelstoke, British Columbia. While construction would not be fully completed until 1971, Canada's "billion dollar highway" was open for traffic from the Atlantic to the Pacific.



Trans-Canada Highway Improvements, Banff, AB

### Era of Renewal

Following a general decline in Western spending on public infrastructure in the 1970s and 1980s, renewed interest in public works investments has emerged in the last ten years. In Canada, governments have worked together to fund all manner of infrastructure projects from community-oriented green infrastructure investments to major projects of regional importance. In Manitoba, the Red River floodway, originally constructed in the 1950s, is being expanded to protect residents against a flood larger than the 1997 "flood of the century." From harbour cleanups to pipe replacement, all orders of government are investing in the renewal of water and wastewater systems.

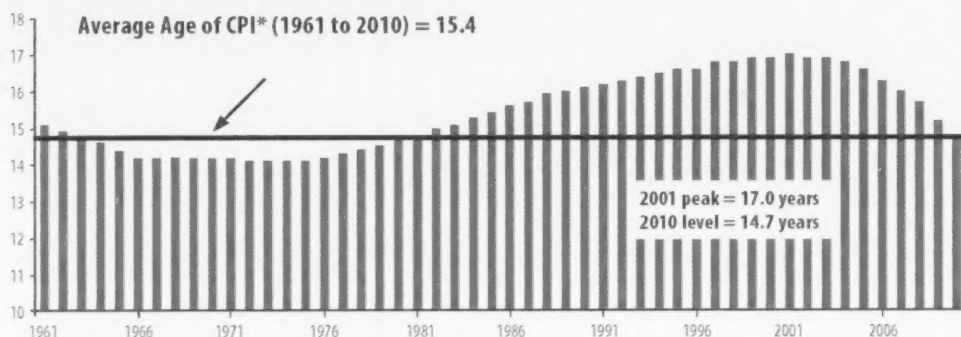


Red River Floodway Expansion, Winnipeg, MB  
(photo courtesy of the Manitoba Floodway Authority)



The benefits of past nation-building investments in public infrastructure are very apparent today. Recent investments have contributed to the ongoing renewal and improvement of what Statistics Canada describes as Canada's core public infrastructure (CPI).<sup>1</sup> The average age of infrastructure is often used as an indication of the state of infrastructure and as seen in the chart below, the average age of Canada's core public infrastructure peaked in 2001 at 17.0 years. Between 2001 and 2010, this average age fell to 14.7 years, including a drop of a full year between 2008 and 2010.<sup>2</sup> The unprecedented infrastructure investments made across the country by all orders of government as part of Canada's Economic Action Plan are likely to contribute to a further decline in the average age of Canada's public infrastructure in the years to come.

The success of current investments does not mean the work of Canada's three orders of government is complete.



Source: Statistics Canada, Investment and Capital Stock Division.

\* Note: CPI includes bridges, roads, water, wastewater, transit, plus cultural and recreational facilities.

Aging infrastructure is a fact of modern societies. The Association of Consulting Engineers of Canada indicates that 50 percent of public infrastructure will have reached the end of its serviceable lifespan by 2027. Governments all over the world are looking at how to invest responsibly to maintain competitiveness and standards of living.

Over the last 50 years, the scope of possible infrastructure investment has increased dramatically. The building blocks of public infrastructure, such as drinking water systems, remain vital to our prosperity and well-being, but exciting new areas for growth and investment now present themselves. In the wake of the world's worst global recession in over 50 years, the biggest challenge for all levels of government will be to invest prudently in public infrastructure in order to safeguard our fragile economic recovery while supporting continued growth.

<sup>1</sup> Statistics Canada defines "core public infrastructure" as comprising the following asset categories: bridges, roads, water, wastewater, public transit, and cultural and recreational facilities.

<sup>2</sup> Estimated based on 2010 spending commitment from Statistics Canada CAPEX data.



West Coast Express Commuter Rail Improvements, Vancouver, BC

## Building Canada through Infrastructure Investments

Modern, world-class public infrastructure is a key to ensuring Canadians enjoy the benefits of a strong economy, a clean environment and vibrant communities.

### Supporting the Economy

The Government of Canada has long recognized the link between infrastructure investments and a strong economy. Public infrastructure supports productivity and innovation, facilitating trade activities and promoting local and regional development. All orders of government must help ensure that the infrastructure investments they do make provide the most support possible for a healthy national economy.

Public infrastructure, such as highways and local roads, allow goods and people to move freely and efficiently. As an exporting nation, Canada needs an integrated and efficient national transportation system. In addition to safe and efficient highways, Canada must ensure seamless connections between all modes of transportation, including railway and shipping facilities, which are increasingly important in high-traffic areas, such as major market hubs and coastal waterways. In a more local context, highways and roads also play an important economic role in connecting smaller, more remote communities to larger economic centres.


This need for connectivity includes broadband, which has quickly become an indispensable part of the world economy. Broadband is especially important in smaller and remote centres where it provides citizens with improved access to government and health services, jobs, business opportunities, education and training. But connectivity is just part of the story; better infrastructure can increase the potential for innovation and economic development.

Communities need to compete globally for investments and a skilled labour force. Investments in safe drinking water and access to cultural and recreational facilities are vital to building prosperous communities where people want to live. In addition, tourism and business travel make significant contributions to Canada's economy. For example, in 2010, the tourism sector in Canada accounted for 1.6 million jobs, that is, 9.2 percent of all jobs in Canada.<sup>3</sup> As such, tourism-related infrastructure projects, such as the construction or improvement of convention centres, can have significant economic and regional impacts.



Port of Montréal Access and Security Upgrades, Montréal, QC

<sup>3</sup> Statistics Canada – Human Resource Module of the Tourism Satellite Account, 2010.



## Supporting the Environment

Canada, like so many other countries is taking steps to protect its natural environment while competing in a global economy. Green infrastructure projects are all around us, from wind turbines to district energy systems. Investments in areas, such as clean technologies, renewable energies, clean water, sustainable transportation, waste management and green buildings, make a significant difference to the environment and support a strong economy. They also contribute to our quality of life, improving the health of our watersheds, managing our solid waste and providing support for energy retrofits of community buildings. These investments make our cities liveable.

Efforts to minimize the potential impacts of our activities are important for public health and are linked to efforts to address climate change. Where we build and how we expand our cities and communities can make a difference. Cities represent a major source of Canada's greenhouse gas (GHG) emissions, and there is a significant potential for energy savings and GHG emissions reduction through a better integration of energy systems in our communities. The level of energy efficiency we achieve, the way we generate and distribute energy and the transportation decisions we make, all have an impact on the quality of the air we breathe. Strategic investments in green infrastructure can contribute to achieving environmental outcomes in our communities. Making green choices as we build and plan infrastructure will help ensure that Canadians benefit from clean air, water and land for generations to come.

## Supporting Communities

Sound infrastructure investments, even small investments in community infrastructure can be transformational, creating vibrant and meaningful places and spaces while increasing recreational opportunities and contributing to urban green spaces.

Community infrastructure itself — local arenas or recreational buildings, libraries and cultural facilities — has a much broader role than simply providing locations for services, social activities and programs. It provides a space for neighbourhoods and people to connect, to create a sense of place and local identity. When people come together and social interaction increases, communities flourish; they are healthier and safer.

Living and moving within a community is also a key factor in quality of life. A range of active transportation options, for example, cycling lanes and walking paths, helps connect people and communities while encouraging physical activity. Investments in public transit also support community health and liveability. For instance, accessible public transit can help seniors, as well as people with disabilities, to maintain their independence. Public transit also increases access to important employment and educational opportunities, as well as providing support for greater community involvement.

Public safety — individual, family, neighbourhood, community and national — is of the utmost importance to a prosperous society; citizens must feel safe in order to be engaged and contribute to society and the economy. A viable and resilient public infrastructure is essential to maintain safety and security: it facilitates the delivery of services, including emergency services in times of crisis, and helps create the type of community environment that promotes citizen involvement and engagement, through safe streets and sidewalks, and recreational and green spaces.





## Building a Better Canada Together

### Our Collaborative Approach

All orders of government in Canada recognize the importance of sound public infrastructure and the contribution it makes to a stronger economy, an improved quality of life and a cleaner environment. In recent years, Canadians have seen the benefits of the historic infrastructure investments that the federal government, provinces, territories and municipalities have been making.

In Canada, municipalities play a leading role in managing and operating this infrastructure. In fact, municipalities own nearly two thirds of Canada's core public infrastructure. In effect, provincial, territorial and municipal governments build, operate, maintain, rehabilitate and replace most public infrastructure in Canada.

When the Building Canada Plan was launched in 2007, it marked a new era for infrastructure partnership funding – and a new relationship among all orders of government. The Plan was the result of engagement and discussions with provinces and territories, as well as the municipal sector. The intent was to identify an approach to provide federal funding for provincial, territorial and municipal public infrastructure in a way that was more predictable and long term in nature. Given the relative responsibilities of each order of government, the approach developed to support public infrastructure was based heavily on the principle of partnership.

*While all governments helped restore infrastructure investments the last few years, we also saw fundamental reforms to the infrastructure funding system itself. Longer-term planning, more efficient programs and a growing emphasis on repairs and rehabilitation – these are essential building blocks for solving our infrastructure problems once and for all.*

– Pat Fiacco, Mayor of Regina, Saskatchewan, January 2011

Net Stock of Public Capital Share  
2009



Municipal	65.0%
Provincial	31.0%
Federal	3.2%

Source: Statistics Canada, Survey of Capital and Repair Expenditures  
Core Public Infrastructure (Water, wastewater, recreation, culture, transit, roads, bridges)

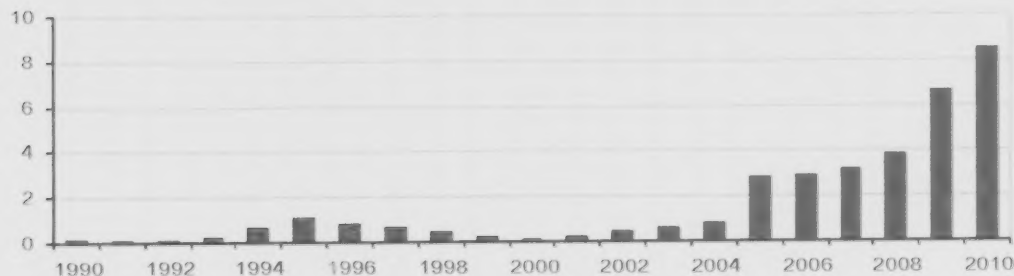


The Building Canada Plan also laid the foundation for the strong partnership that was needed to mobilize quickly and respond to the global economic slowdown that hit in late 2008. On January 27, 2009, in the 2009 Budget, the Government of Canada announced that it would implement new short-term stimulus programs as part of its Economic Action Plan; success would require the strong collaboration of its partners.

The results of the Economic Action Plan are a clear testament to the high degree of cooperation shown by all orders of government across Canada, as efforts were successfully made to identify construction-ready projects, cut red tape and streamline project approvals.

These results are not just limited to the Economic Action Plan. As provinces, territories and municipalities moved forward with record amounts of public infrastructure investments, the Government of Canada provided the necessary financial support. In fact, as is seen in the chart below, federal contributions and other transfer payments for public infrastructure nearly tripled over the past five years, making these increased investments possible. The majority of these funds have been provided through Infrastructure Canada, including nearly 75 percent in 2010-11.

#### **Federal Infrastructure Funding Support for Provincial, Territorial and Municipal Infrastructure\* (Current \$B)**

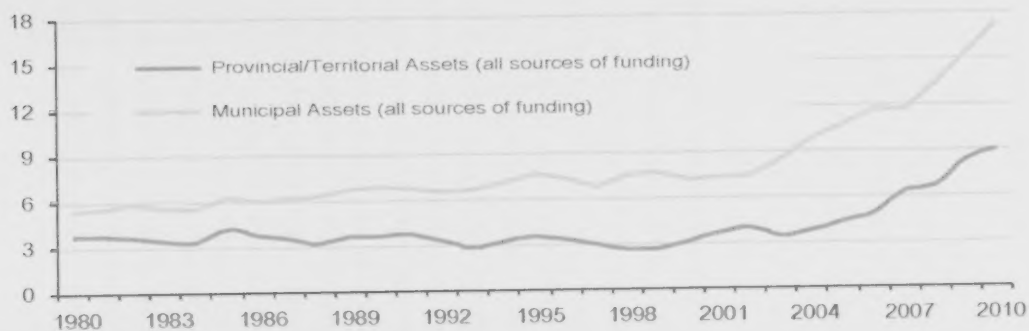


Source: Finance Canada & Infrastructure Canada, June 2011

\*All public infrastructure, including Core Public Infrastructure

Over the past 10 years, provincial, territorial and municipal governments, with the funding support from the Government of Canada, have been working to address public infrastructure needs across the country. After remaining relatively stable throughout the 1980s and 1990s, investments in provincial, territorial and municipal assets increased rapidly over the last decade. The chart below shows the increase in investment in municipally-owned, core public infrastructure (the green line) as well as a similar increase in investments in provincial and territorial assets (the red line).

### Investments into Core Public Infrastructure\* (Constant \$B)



Source: Statistics Canada, August 2011

\* Includes bridges, roads, water, wastewater, transit, plus cultural and recreational facilities

*Municipalities are turning stimulus money from Ottawa into new jobs by matching federal investments dollar for dollar and managing thousands of front-line projects across the country. It shows that some challenges are too big for any one government to solve on its own.*

– Gérald Tremblay, Mayor of Montréal, Quebec, May 27, 2010



Mayo B Hydro Plant, Carmacks and Mayo, YT

## *The Government of Canada's Investments*

In 2006, the federal government undertook far-reaching consultations on the future of infrastructure investments. Provincial, territorial and municipal partners and stakeholders made it clear that the country wanted and needed long-term predictable funding that supported both large-scale and local priorities. The Government of Canada listened and developed a world class approach to infrastructure investments to provide long-term stable funding – the **Building Canada Plan**.

Following the launch of the \$33 billion Building Canada Plan, the Government of Canada continued its commitment to infrastructure in Canada. As part of the Plan, it increased funding under the **Gas Tax Fund**, which reached \$2 billion a year nationally in 2009-10 and will be made permanent at that level beginning in 2014.

In 2009, in response to the global economic downturn, billions of dollars in short-term funding were committed to infrastructure under the Economic Action Plan, including the Infrastructure Stimulus Fund and the Building Canada Fund-Communities Component Top-Up. This short-term funding was a welcome addition to the government's existing infrastructure funding. Also in 2009, the government launched the **Green Infrastructure Fund**, rounding out Infrastructure Canada's comprehensive suite of infrastructure investments.

*These are the investments that will support a prosperous Canada  
well into the 21<sup>st</sup> century*

### **Taking Stock of Federal Investments**

Funding infrastructure in Canada is both challenging and rewarding. Managing taxpayers' dollars in a prudent manner drives infrastructure investments that support the priorities of the nation: strengthening the economy while supporting local goals.

Since January 27, 2009 (Budget 2009), Infrastructure Canada has committed more than \$10.6 billion toward approximately 6,400 infrastructure projects. When combined with contributions from the provinces, territories, municipalities and other funding partners, this means approximately \$30 billion has been committed for infrastructure projects in communities across the country.



Infrastructure Canada's commitments since the launch of the Building Canada Plan in 2007<sup>4</sup> include:

- Over \$11.5 billion in targeted investments
- Almost \$2 billion in Provincial-Territorial Base Funding
- Over \$3.7 billion in Gas Tax Funding<sup>5</sup>

**Targeted Investments** focus on both community and large-scale infrastructure. Funds are targeted toward priorities, such as clean drinking water and public transit, and include commitments under the Building Canada Fund, the Infrastructure Stimulus Fund and the Green Infrastructure Fund.

**Provincial-Territorial Base Funding** provides provinces and territories with stable long-term funding geared toward their priorities. This funding is streamlined and flexible with simplified administrative requirements.

**The Gas Tax Fund** goes to municipalities to support environmentally sustainable municipal infrastructure projects.

In 2008, the Government of Canada announced that the Gas Tax Fund would become a permanent measure, providing \$2 billion per year in predictable and long-term infrastructure funding to Canada's cities and towns.

In addition to funding provided by Infrastructure Canada, the federal government has a number of other significant infrastructure funds:

- **Transport Canada** manages over \$3 billion in funding for gateways and border crossings initiatives.
- **Regional development agencies** have committed \$500 million for recreational facilities as part of Canada's Economic Action Plan.
- **Public-Private Partnerships Canada** will provide \$1.2 billion for public-private partnerships.

<sup>4</sup> As of September 20, 2011 (see also note 5 on the Gas Tax figure).

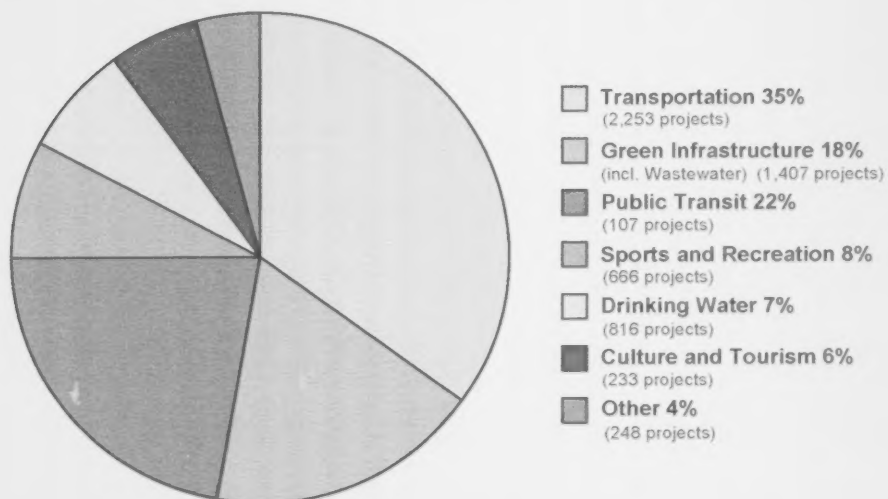
<sup>5</sup> Represents the cumulative amount spent from 2005-06 to 2009-10.

## What We Invest In

The majority of Infrastructure Canada's funding commitments under targeted programs fall into six major investment categories.

Major Category	Federal Investments* (\$ billions)
Transportation	\$3.93
Green Infrastructure (incl. wastewater)	\$2.09
Public Transit	\$2.55
Sports and Recreation	\$0.93
Drinking Water	\$0.81
Culture and Tourism	\$0.68

### Target Funding by Major Category\*



\* Includes Building Canada Fund – Major Infrastructure Component, Building Canada Fund – Communities Component, Infrastructure Stimulus Fund and Green Infrastructure Fund

### Federal Funding by Jurisdiction\*

Province/Territory	Federal Funds \$M
British Columbia	2,667
Alberta	2,069
Saskatchewan	766
Manitoba	815
Ontario	7,411
Quebec	4,779
New Brunswick	642
Nova Scotia	720
Prince Edward Island	287
Newfoundland and Labrador	490
Yukon	316
Northwest Territories	249
Nunavut	245

**\* Totals include:**

- Total commitments under Building Canada Fund — Major Infrastructure Component, Building Canada Fund — Communities Component, Infrastructure Stimulus Fund and Green Infrastructure Fund (since 2007)
- Total allocations under the Provincial-Territorial Base Fund (2007-08 to 2013-14)
- Total allocations under the Gas Tax Fund (2007-08 to 2011-12)



New Water Tower, Sackville, NB

## Community Investments

While these investments certainly add up to a more prosperous country, the biggest impact they have is at home in our communities, as the following projects show.

### **Resolving Water Quality Issues: Rocky View, AB**

Located in the foothills just west of Calgary, residents in the Bragg Creek area coped for years with boil-water orders and drinking water that had to be trucked in from Calgary. With no form of water treatment in the community, shallow wells drawing water from the nearby Elbow River were always at risk. Now, public infrastructure investments are helping to build a new potable water treatment plant.

### **Brownfield Remediation: Harvey, NB**

In the small village of Harvey, southwest of Fredericton, an abandoned wood mill had become a public danger, with rotting piles of cedar posing a fire hazard. The community also faced the threat of the abandoned mill operations contaminating the village's water supply. Public infrastructure investments in brownfield remediation turned a derelict site in the centre of town into a space that can be used by the community.

### **Promoting Canadian Culture: Baie-Comeau, QC**

The City of Baie-Comeau now has a large-scale cultural centre thanks to funding from the federal Infrastructure Stimulus Fund. The Centre des arts de Baie-Comeau provides space for dance and music classes, rehearsals and outreach programs. The venue has the capacity to host artists in residence to support the creation of new works, and its new performance hall can be configured to accommodate large or small crowds. The facility, which also houses municipal library services, is a valuable addition to community.



Southwest Ring Road, Edmonton, AB





## Key Areas of Investment

The Government of Canada's infrastructure investments span the country and cover all major categories of public infrastructure. This infrastructure supports the economy and makes Canada a better place in which to live and invest.

Below are brief descriptions of Infrastructure Canada's main funding priorities and some spotlighted projects. To see what projects are in your neighbourhood, visit: [www.infrastructure.gc.ca](http://www.infrastructure.gc.ca).

### Wastewater

Investment in wastewater infrastructure is important for the protection of public health and to improve the long-term viability and health of Canada's aquatic environments. Wastewater collection and treatment systems contribute to a number of important outcomes, including improvements in the level of wastewater treatment and an increase in the number of households connected to systems. Improving the reliability of these systems is also important. Even where adequate wastewater treatment systems are in place, storm water can cause sewer systems to overflow, allowing untreated wastewater to spill directly into our rivers, lakes and oceans.

#### **Kieley Drive/Everard Avenue Sewer, St. John's, NL**

In the Kieley Drive/Everard Avenue area of St. John's, property owners had long-standing problems with sewer backups and basement flooding. City crews had to visit the neighbourhood every week to flush municipal sewer lines and perform maintenance. Now, with the help of \$200,000 from the federal government, the replacement of all the municipal sewer lines in the area is complete. The new sewer system will improve health and safety for area residents and allow the city to redirect valuable maintenance resources to other municipal projects.

### Drinking Water

Although Canada has abundant freshwater reserves within its borders, many communities face significant pressures regarding drinking water management, supply and quality. Improving infrastructure for drinking water helps to protect human health by ensuring that Canadians have access to safe, reliable and secure drinking water that meets or exceeds the *Guidelines for Canadian Drinking Water Quality*.

Investments in improved water treatment facilities can increase both the quality of drinking water and the number of households with access to it. Improvements to water distribution systems can increase the number of households with metering which, in turn, leads to decreased per capita water use. Better water infrastructure can decrease water leakage or loss, and decrease the use of treatment chemicals and the number of boil-water advisories a community experiences.

### **Gilbert Plains and Grandview – Town Reservoirs, Gilbert Plains, MB**

Thanks to a federal contribution of \$723,333, two rural municipalities bordering on Riding Mountain National Park in the parkland area of western Manitoba can now boast about the quality and quantity of drinking water in their communities. As part of this project, Gilbert Plains and Grandview upgraded the area's water treatment and storage capacity, expanded the water reservoirs and converted their treatment facilities into pumping stations. Leaky water mains were also replaced and emergency backup power generators installed.

### **Transportation**

Roads provide a basic service that directly impacts the quality of life in all Canadian communities. Transportation infrastructure supports the safe and effective movement of people and goods. An efficient national transportation network ensures Canadian communities are connected both to each other and to the world. This network provides key support in promoting Canada's competitiveness, trade, security and quality of life.

Investments in highways and roads improve transportation safety and efficiency, and minimize the environmental impacts of congestion and greenhouse gas emissions. In particular, these investments improve mobility by easing congestion, and decreasing traffic accidents and the amount of emissions. They can also lead to a decrease in the response time for emergency vehicles which, in turn, increases the number of households with improved fire protection. At the same time, investments in the National Highway System, including connections to intermodal facilities and international gateways, increase the competitiveness of our economy.

### **Ring Roads to Improve Transportation Efficiencies in Calgary and Edmonton, AB**

The Government of Canada is contributing \$150 million toward the completion of ring roads around Calgary and Edmonton. In Calgary, 25 km of six-lane roadway will link 17<sup>th</sup> Avenue SE to Macleod Trail. In Edmonton, 11 km of new highway will complete the southern half of the ring road and link Highway 216 to the North-South Highway 2 corridor. Improved traffic efficiencies, streamlined shipping routes and lower collision rates are among the many benefits these projects will bring to Alberta's two largest cities.



Town Reservoirs, Gilbert Plains and Grandview, MB

## Public Transit

Efficient urban transportation is a vital ingredient for addressing short-term economic challenges and preparing Canadian communities to meet the economic and environmental realities of the future. Public transit is a key part of urban transportation infrastructure. Well-planned public transit systems can provide a fast, effective and economical transportation option for city residents, as well as broader access to jobs, education, and to health care and recreational facilities.

Investments in public transit also help to increase the number of people travelling by transit, thus taking cars off the road and reducing congestion and air pollutants. These investments can increase the efficiency of operations resulting in cost savings through a reduction in travel times.

### Meeting Demand for Public Transit in Vancouver, BC

The Major Infrastructure Component of the Building Canada Fund is contributing over \$9 million to help the West Coast Express commuter rail service meet the demand for urban public transit in metro Vancouver. With a fleet of state-of-the-art trains and highway coaches, West Coast Express serves commuters in Vancouver and suburban Mission, Port Haney, Maple Ridge, Pitt Meadows, Port Coquitlam, Coquitlam and Port Moody. To meet the increasing demand for service from suburban commuters, West Coast Express is purchasing seven additional rail cars and making upgrades to Vancouver's Waterfront station and the station in Mission. Longer platforms in both stations will improve passenger access and safety, and accommodate longer trains.

## Green Energy

Canada's growing economy and population combine to create ever-increasing energy needs. Accommodating energy demand strictly from conventional fossil fuels contributes to air pollution and greenhouse gas emissions. There is a pressing need for clean energy infrastructure and the reinforcement and expansion of existing electricity transmission systems. To this end, investments in sustainable energy infrastructure are increasingly important. Renewable electricity investments, for instance, displace electricity generated from fossil fuels, mainly coal and oil, which account for a large amount of greenhouse gas emissions and air pollution in Canada. As well, renewable electricity sources are frequently small and distributed across a larger geographic area. This increases the number of sources of generation, which leads to a more distributed and therefore more resilient, reliable and secure system.

### **Northwest Transmission Line, Bob Quinn Lake to Skeena, BC**

The Government of Canada is contributing \$130 million to the development of the Northwest Transmission Line through its Green Infrastructure Fund. When completed, it will convey 287 kilovolts along a mountainous, 344-kilometre corridor, initiating at the Skeena Substation near Terrace and terminating at a new substation that is to be built near Bob Quinn Lake. The line will provide a reliable supply of clean, renewable power to remote northern British Columbia communities that currently rely on diesel generators for electricity. Construction is expected to continue until late 2013.

## Culture and Tourism

Culture and tourism investments showcase Canada and Canadian talent to the world. Our national identity and ingenuity are put centre stage through investments in opera houses, exhibition facilities and discovery centres. Many of Infrastructure Canada's culture and tourism investments, such as those made in library facilities and exhibition halls, result in multi-purpose installations, often serving as the focal point for community activities and cultural events. In turn, investments in these facilities generate spinoff activities that support the larger economic priorities of the community, promoting a region and Canada as a leading destination for tourists from around the world while enhancing the ability of communities to express, preserve, develop and promote their cultural heritage.

### **New Convention Centre Will Have Significant Economic Impact, Ottawa, ON**

Made possible, in part, by a \$50 million contribution from the Major Infrastructure Component of the Building Canada Fund, the new Ottawa Convention Centre is now complete. The project tripled the Centre's hosting capacity and is projected to deliver economic spinoffs of \$129 million between 2011 and 2015 along with 1,200 new jobs. The downtown facility, which features a unique curved glass facade, has established new standards for sustainable design and is fast becoming an architectural landmark in Ottawa's prime tourist area.

Ottawa Convention Centre, Ottawa, ON

### **New Museum Will Promote Local Culture, Edson, AB**

The Galloway Station museum has been an important part of Edson's cultural fabric, documenting the railway, coal mining and lumber industries that established the town and its economy. However, existing display facilities could no longer accommodate the growing museum collection. Thanks to a \$950,000 contribution from the federal Infrastructure Stimulus Fund, the space challenge has been addressed. The work involves expanding the museum's exhibit space and adding a multi-purpose room and reception hall that can be used for corporate and educational events. Building upgrades also help safeguard the artifacts on display; better lighting, temperature and humidity controls conserve the wide variety of delicate materials. Shipping and receiving facilities offer improved security and handling.

### **Sports and Recreation**

For communities throughout the country, sports and recreational infrastructure is a cornerstone of community vitality and quality of life. In addition to promoting healthy active lifestyles, Canada's arenas, community centres, aquatic facilities, parks and outdoor spaces often serve as the focal point for community events and meetings, and contribute to strong, vibrant and healthy communities. These investments promote social inclusion and community cohesion while helping to reduce crime and community violence. Modern sports facilities also support the development of Canadian athletes and provide opportunities for Canadian communities to host regional, national and international sporting events.

### **New Sport Facility for Small Community, Buick Creek, BC**

The residents of Peace River Regional District have wanted a local indoor ice arena and recreation facility for some time. With \$946,267 in support from the Government of Canada's Recreational Infrastructure Canada program and \$200,000 from the Infrastructure Stimulus Fund program, this dream has become a reality. Community residents now enjoy a regulation-sized ice arena housed within a brand new building. The facility features accessible heated change rooms, service and storage rooms, and concession space. The building is also to people with disabilities. Hockey, figure skating, broomball and public skating will be offered in the winter season, while volleyball, floor hockey and indoor soccer are available from May to October. The facility also provides a venue for community gatherings and social events.



#### **The Gas Tax Fund (\$2B annually)**

Through the Gas Tax Fund, municipalities across Canada benefit from \$2 billion a year for local priorities. The program provides predictable yearly funding with considerable flexibility: these funds do not have to be matched, they can be banked for future years and they do not require upfront application processes for individual projects. The Gas Tax Fund was launched in 2005-06. In 2008, the government announced that the Gas Tax Fund would become a permanent measure, providing \$2 billion per year in predictable and long-term infrastructure funding to Canada's cities and towns.

#### **The Provincial-Territorial Base Fund (PT Base Fund) (\$2.3B)**

Through the Provincial-Territorial Base Fund, provinces and territories receive predictable, stable, flexible funding. This funding, which runs to 2013-14 is provided through a streamlined federal approval process and affords provinces and territories with considerable flexibility. When the fund was established in 2007-08, jurisdictions were to receive \$25 million each year over seven years (total \$175 million). Under the Economic Action Plan, jurisdictions were given the additional flexibility of accelerated access to this funding, in support of economic recovery.

In recognition of the small population of the three northern territories, the Building Canada Fund allocation in the territories was combined with their PT Base Fund allocations. The combined funding is delivered under the terms and conditions of the PT Base Fund. The resulting PT Base funding envelope is \$185.8 million, \$182.6 million and \$182.9 million in each of the Northwest Territories, Nunavut and Yukon.

#### **The Building Canada Fund (\$9.3B including Top-Up)**

The Building Canada Fund addresses national and regional priorities, as well as community initiatives, through a dual approach. The Major Infrastructure Component of the fund focuses on larger, strategic projects of national and regional significance that deliver economic, environmental and social benefits. The Communities Component prioritizes local initiatives through funding set aside for projects in communities with populations of less than 100,000 (2008-09 to 2016-17).

#### **The Infrastructure Stimulus Fund (\$4B)**

Through Canada's Economic Action Plan, the federal government established a multi-billion Infrastructure Stimulus Fund that provided funding to provincial, territorial, municipal and community construction-ready infrastructure projects. The Infrastructure Stimulus Fund complemented existing federal infrastructure funding by focusing on short-term objectives for economic stimulus (2008-09 to 2011-12).

#### **The Green Infrastructure Fund (\$1B)**

Through Canada's Economic Action Plan, the federal government established the Green Infrastructure Fund. This five-year program (2009-10 to 2013-14) specifically targets projects that will improve the quality of the environment and lead to a more sustainable economy over the long term. The Green Infrastructure Fund supports projects that promote cleaner air, reduced greenhouse gas emissions and cleaner water.

#### **The Gateways and Border Crossings Fund (\$2.1B)**

Transport Canada is responsible for the Gateways and Border Crossings Fund through investments to improve the flow of goods between Canada and the rest of the world. This merit-based fund enhances infrastructure at key locations, such as major border crossings between Canada and the United States.

#### **The Asia Pacific Gateway and Corridor Initiative (\$1B)**

Through the Asia-Pacific Gateway and Corridor Initiative, led by Transport Canada, investments support specific strategies to seize geographic, trade and transportation opportunities in key regions. In advancing the gateway and corridor approach, the Government of Canada is pursuing long-term policy, planning and strategic investment in transportation systems to strengthen Canada's position in international commerce.

#### **Public-Private Partnerships Canada Funding (\$1.2B)**

The \$1.2 billion Public-Private Partnership Canada Fund is a merit-based program that supports P3 infrastructure projects that achieve value for Canadians, develop the Canadian P3 market and generate significant public benefits. It is delivered by Public-Private Partnerships Canada.

#### **The Recreational Infrastructure Canada Fund (\$500M)**

The Recreational Infrastructure Canada program invested \$500 million in recreational facilities across Canada as part of Canada's Economic Action Plan. This national initiative has provided temporary economic stimulus that helped to reduce the impact of the global recession while renewing, upgrading and expanding recreational infrastructure in Canadian communities. This funding is delivered by federal regional development agencies (2008-09 to 2011-12).



Summerside Wind Farm, Summerside, PE

## Looking Ahead

### Continued Partnership

Achieving our goals as a nation means that all orders of government and other partners, must work together. While the bulk of public infrastructure in Canada is owned and managed by provincial, territorial and municipal governments, the Government of Canada recognizes the central role that this infrastructure plays in our lives and in our economic well-being.

Infrastructure in the 21<sup>st</sup> century is vast, complex and intrinsically interconnected. But fundamentally, as a nation, the challenges are very similar to those of the 1800s: governments, citizens and private industry must ensure that commerce, workers and families thrive in what is still a young, sparsely populated country. Today, our ports and canal networks, rail system and highways have been joined by an information network connecting people, financial institutions, media and government. Prosperity is still premised on the strength of our communities and the basic services that support them.

In 2006, municipal, provincial and territorial governments expressed the desire for more predictable, long-term funding to better plan and meet continued infrastructure needs. The \$33 billion Building Canada Plan was launched in 2007 and marked a new era for infrastructure partnership funding. A fundamental pillar of the Plan was to provide that stability through long-term predictable funding, a goal achieved with the help of the Gas Tax Fund.

Through the Gas Tax Fund, money flows to communities of all sizes on a regular, predictable basis, which allows municipalities to pool, bank, borrow against and cash manage these financial resources in a way that gives them greater flexibility in managing their infrastructure assets. The Gas Tax Fund reached \$2 billion a year nationally in 2009-10 and will be made permanent at that level beginning in 2014.

Nation building is never ending. The Government of Canada is committed to a continued partnership approach to both national and local infrastructure priorities. Only through cooperative efforts will every dollar invested in infrastructure meet today's needs while addressing the growth and development needs to come.

## In Support of a Long-Term Plan

Moving forward, the federal government invites partners from across the country to engage in a constructive dialogue on a new long-term public infrastructure plan that will build on past achievements while strengthening partnerships between all orders of government. The process will roll out in three phases.

Phase I is about taking stock of Canada's infrastructure investments and identifying the many factors that have contributed to the success of thousands of projects across the country. With a focus on the accomplishments achieved through strong partnerships, the Government of Canada is also working to share details on some of the more important investments that have been made, such as improvements to water quality in the Great Lakes, the success of the Gas Tax Fund and the significant investment in public transit.

Phase II of the planning process will build on the first round of analysis, moving beyond what has been accomplished over the last 10 years in terms of infrastructure investments, to build the technical and policy knowledge that will serve as the empirical basis for the development of a long-term infrastructure plan and inform the broader discussions that will be the focus of the third phase of this process. During this phase, we will work with our partners and stakeholders, experts and leading practitioners to undertake research and analysis around five themes: the economy, the environment, stronger communities, infrastructure financing, and asset planning and sustainability.

Phase III of the process will focus on a constructive dialogue with our provincial, territorial and municipal partners, and other key stakeholders. Building on the work completed in the first two phases, this last phase of engagement will explore the broad principles and future directions for public infrastructure in Canada. This phase will also provide a forum to identify and discuss key lessons from past plans and programs that can aid in the development of the next long-term public infrastructure plan.

Over the coming months all levels of government will turn their attention to the future of public infrastructure in Canada. They will be joined by experts as well as key stakeholders and the public at large. Working together will ensure that Canada has a solid public infrastructure foundation for continued growth and prosperity for years to come.